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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,154	10/20/2003	David W. Baarman	AM1146	6386

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ALTICOR INC.
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EXAMINER	
GRANT, ROBERT J	

ART UNIT	PAPER NUMBER
2838	

DATE MAILED: 04/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/689,154	BAARMAN, DAVID W.	
	Examiner	Art Unit	
	Robert Grant	2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 3-1-04 (1 page) 3-4-05 (1 page)
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 7, 18, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Luo (US 6,376,764).

As to Claim 1 Luo discloses An electrostatic charge storage assembly (Figure 5) comprised of: a capacitor (element 19); and a discharge regulator coupled with the capacitor (element 37).

As to Claim 2, the electrostatic charge storage assembly of claim 1 further comprising a plurality of load connections (Figure 2, element 23).

As to Claim 3, the electrostatic charge storage assembly of claim 1, wherein the discharge regulator regulates the discharge rate of the capacitor to a load coupled with the load connections so that the discharge rate substantially emulates the discharge rate of a battery (Column 2 lines 54-67, column 3 lines 1-7, and Column 9, lines 14).

As to Claim 7, the electrostatic charge storage assembly of claim 1, further comprising: a charging circuit (figure 5, elements 17 and 27).

As to Claim 18,Luo discloses a self-contained rechargeable electrostatic charge storage assembly comprising: a charge storage device comprising one or more capacitors (Figure 5, element 19); a charging circuit (element 17 and 27); a charge control coupled to the charging circuit and the charge storage device (elements 17 and 27); a discharge control coupled with the charge storage device (Element 37); a first contact coupled with the charging circuit (seen in figure 5, no reference number given but there is an obvious contact between the capacitor and charging circuitry); a second contact coupled with the discharge control circuit (seen in figure 5, no reference number given but there is an obvious contact between the capacitor and discharge circuitry); and a housing substantially containing the first contact, the second contact, the discharge control, the charge control, the charging circuit, and the charge storage device, said housing further having a plurality of apertures operable to expose the first contact and the second contact to therethrough (Figure 2, elements 23 are the second contacts, and element 17 is obviously connected to the charging circuity).

As to Claim 21, Lou discloses a method for providing power to an electronic device, the method comprising: charging an electrostatic charge storage device (Figure 5, element 19); controlling the discharge of the electrostatic charge storage device to substantially

emulate the discharge of a battery (element 37) (Column 2 lines 54-67, column 3 lines 1-7, and Column 9, lines 14).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luo in view Hammond et al (US 5,012,121).

As to Claim 4, Luo discloses all the limitations of claim 3, which claim 4 is dependent upon. Luo does not expressly disclose what elements comprise the make up of his discharge regulator. Hammond teaches in Figure 1, that a discharge regulator can be a zener diode (element 22). It would have been obvious to a person having ordinary skill in the art at the time of this invention to use a zener diode as taught by Hammond as a discharge regulator, in order to control the discharging of a capacitor to provided a regulated supply of power.

5. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luo in view of Kaschmitter et al. (US 5,529,971).

As to Claims 5 and 6, which are each dependent upon claim 1, Luo discloses all the limitations, but does not expressly discloses wherein the capacitor is a super capacitor or an aerogel super capacitor. Kaschmitter discloses a super capacitor using aerogel in order to create a lightweight and very high energy density capacitor (Column 2, lines 60-67). It would have been obvious to a person having ordinary skill in the art at the time of this invention to combine Kaschmitter's aerogel super capacitor with Luo's capacitor battery, in order to create a battery capable of greater energy storage and lighter weight.

6. Claims 8-9, 19-20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luo in view of Crawford (US 5,461,297).

As to Claims 8 and 9 which are dependent upon claims 7 and 8 respectively, Claims 19 and 20 which are depended upon claims 18 and 19 respectively, and claim 22 which is dependent upon 21, Luo discloses all the limitations of the independent claims, 7 18 and 21. Luo does not expressly disclose using inductive charging or having multiply secondary coils. Crawford teaches a capacitor charging system (Figure 1) that uses inductive charging (Elements 115) as well as multiple secondary coils (elements 115a and 115b). It would have been obvious to a person having ordinary skill in the art at the time of this invention to combine the teachings of Crawfords inductive charging system in place of Luo's, in order to provide the ability to not need a physical connection

between the voltage source and the battery, and to further have the ability to switch between power sources, making the power sources in series or parallel in order to provide a higher voltage or current charging.

7. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luo in view of Matsui (US 5,982,050).

As to Claims 10 and 11, which are dependent upon claims 7 and 10 respectively, Luo discloses all the limitations of claim 7, but does not expressly disclose a charge regulator coupled with the capacitor, or that the charger regulator is a zener diode. Matsui discloses in Figure 3, a zener diode charge regulator (element 16) coupled with the capacitor (element 10). It would have been obvious to a person having ordinary skill in the art at the time of this invention to combine the teachings of Matsui (Column 3, lines 33-41) with the charging of Luo capacitor, in order to regulate the amount of charge in a capacitor, and when the charge exceeds the limit set by the zener diode, the capacitor is discharged till it is at the acceptable limit.

8. Claims 12,13 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luo in view of Nozu et al. (US 6,617,830).

As to Claim 12, Luo discloses an electrostatic charge storage assembly (Figure 5) comprised of: a capacitor (element 19); and a discharge regulator coupled with the

capacitor (element 37). Luo does not expressly disclose a plurality of capacitors. Nozu discloses a plurality of capacitors (Figure 1, elements 11 and 12). It would have been obvious to a person having ordinary skill in the art at the time of this invention to combine the teachings of Nozu's and use a polarity of capacitors in Luo's design in order to provide more a capacitors and therefore store more power.

As to Claim 13, Luo in view of Nozu disclose all the limitations of claim 12, and Luo further discloses where the discharge regulator controls the plurality of capacitors so that the discharge rate of the plurality of capacitors substantially emulates the discharge rate of a battery (Column 2 lines 54-67, column 3 lines 1-7, and Column 9, lines 14).

As to Claims 15, 16 and 17, Nozu discloses where in the capacitors are electrically coupled in series, parallel and in series and parallel (Column 4, lines 21-26). It would have been obvious to connect capacitors in series if a greater voltage is required, in parallel if a greater current is required, and in a combination if greater voltage and current are required.

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luo in view of Nozu in further view of Hammond.

As to Claim 14, Luo in view of Nozu disclose all the limitations of claim 13. Luo in view of Nozu do not expressly disclose the make up of the discharge regulator. Hammond

teaches in Figure 1, a discharge regulator can be a zener diode (element 22). It would have been obvious to a person having ordinary skill in the art at the time of this invention to use a zener diode as taught by Hammond as a discharge regulator, in order to control the discharging of a capacitor to provided a regulated supply of power.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Grant whose telephone number is 571-272-2727. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on 571-272-2084. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

4/18/05

RG

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